

AMENDMENTS TO THE CLAIMS:

Please cancel Claims 5 through 12 and 28 through 35 without prejudice to or disclaimer of the subject matter recited therein.

Please amend Claims 1 through 4, 13, 14, 24 through 27, and 36, and add Claims 43 through 57 to read as follows:

1. (Currently Amended) A network apparatus, ~~connected to other network entities via a first type of connection and other network entities via a second type of connection~~, comprising:
 - a selective spoofing element, which spoofs some of the multiple connections of the first type based on their associated applications unit that
 - (a) determines what application is using a transport level connection to said apparatus
 - and (b) decides whether or not to perform transport level spoofing on the transport level connection to said apparatus in accordance with the determination of what application is using the transport level connection to said apparatus,
 - wherein at least one of the following conditions is satisfied:
 - (1) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, maximum segment size is set in accordance with the determination of what application is using the transport level connection to said apparatus;
 - (2) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, a three-way

handshake parameter is set in accordance with the determination of what application is using the transport level connection to said apparatus; and

(3) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, connection priority is set in accordance with the determination of what application is using the transport level connection to said apparatus.

2. (Currently Amended) The ~~network~~ apparatus of claim 1, wherein said selective spoofing element unit only spoofs connections ~~of the first type~~ associated with high throughput applications.

3. (Currently Amended) The ~~network~~ apparatus of claim 1, wherein said selective spoofing element unit assigns spoofing resources, including buffer space and control blocks, to the spoofed connections transport level connection.

4. (Currently Amended) The ~~network~~ apparatus of claim 1, wherein said selective spoofing element ~~spoofs connections using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof~~ unit determines what application is using the transport level connection in accordance with a TCP port number.

5. (Cancelled)

6. (Cancelled)

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The ~~network~~ apparatus of claim 1, 12, wherein the transport level ~~first~~ connection uses one of the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP).

14. (Currently Amended) The ~~network~~ apparatus of claim 1, wherein ~~the second connection is~~ said apparatus is connected to another apparatus via a backbone connection.

15. (Original) The ~~network~~ apparatus of claim 14, wherein the backbone connection is via a wireless link.

16. (Original) The ~~network~~ apparatus of claim 15, wherein the wireless link has high latency and high error rate.

17. (Original) The ~~network~~ apparatus of claim 15, wherein the wireless link is a satellite link.

18. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a network gateway.

19. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a host.

20. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a hub.

21. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a switch.

22. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a VSAT.

23. (Original) The ~~network~~ apparatus of claim 1, wherein said ~~network~~ apparatus is a component of a router.

24. (Currently Amended) A method; comprising:
~~establishing multiple connections of a first type associated with different applications; and~~

selectively performing transport level spoofing some of the multiple connections of the first type based on their associated applications on a transport level connection in accordance with a determination as to what application is using the transport level connection.

wherein at least one of the following conditions is satisfied:

(1) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, maximum segment size is set in accordance with the determination as to what application is using the transport level connection;

(2) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, a three-way handshake parameter is set in accordance with the determination as to what application is using the transport level connection; and

(3) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, connection priority is set in accordance with the determination as to what application is using the transport level connection.

25. (Currently Amended) The method of claim 24, wherein said selective spoofing step only spoofs connections ~~of the first type~~ associated with high throughput applications.

26. (Currently Amended) The method of claim 24, wherein said selective spoofing step assigns spoofing resources, including buffer space and control blocks, to the spoofed ~~connections~~ transport level connection.

27. (Currently Amended) The method of claim 24, wherein said selective spoofing step ~~spoofs connections using at least one spoofing rule based on destination address, source address, destination port number, source port number, options, a differentiated services (DS) field or combinations thereof~~ determines what application is using the transport level connection in accordance with a TCP port number.

28. (Cancelled)

29. (Cancelled)

30. (Cancelled)

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Cancelled)

36. (Currently Amended) The method of claim ~~35~~, 24, wherein the transport level first connection uses one of the Transmission Control Protocol (TCP) and the User Datagram Protocol (UDP).

37. (Original) The method of claim 24, wherein said method is performed in a network gateway.

38. (Original) The method of claim 24, wherein said method is performed in a host.

39. (Original) The method of claim 24, wherein said method is performed in a hub.

40. (Original) The method of claim 24, wherein said method is performed in a switch.

41. (Original) The method of claim 24, wherein said method is performed in a VSAT.

42. (Original) The method of claim 24, wherein said method is performed in a router.

43. (New) An apparatus comprising:

a selective spoofing unit that decides whether or not to perform transport level spoofing on a transport level connection to said apparatus in accordance with at least one field in a packet received by said apparatus,

wherein at least one of the following conditions is satisfied:

(1) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, maximum segment size is set in accordance with the at least one field;

(2) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, a three-way handshake parameter is set in accordance with the at least one field; and

(3) in the case that said selective spoofing unit has decided to perform transport level spoofing on the transport level connection to said apparatus, connection priority is set in accordance with the at least one field.

44. (New) An apparatus according to Claim 43, wherein the at least one field comprises a destination network level address.

45. (New) An apparatus according to Claim 43, wherein the at least one field comprises a source network level address.

46. (New) An apparatus according to Claim 43, wherein the at least one field comprises a destination port number.

47. (New) An apparatus according to Claim 43, wherein the at least one field comprises a source port number.

48. (New) An apparatus according to Claim 43, wherein the at least one field comprises a transport level options field.

49. (New) An apparatus according to Claim 43, wherein the at least one field comprises a differentiated services (DS) field.

50. (New) An apparatus according to Claim 43, wherein the at least one field comprises a plurality of fields selected from the group consisting a destination IP address, a source IP address, a TCP destination port number, a TCP source port number, a TCP options field, and an IP differentiated services (DS) field.

51. (New) An apparatus according to Claim 43, wherein the at least one field comprises an IP address and a TCP port number.

52. (New) An apparatus according to Claim 43, wherein the at least one field is a TCP field.

53. (New) A method comprising:
selectively performing transport level spoofing on a transport level connection in accordance with at least one field in an IP packet or TCP packet, wherein at least one of the following conditions is satisfied:

(1) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, maximum segment size is set in accordance with the at least one field;

(2) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, a three-way handshake parameter is set in accordance with the at least one field; and

(3) in the case that said selective spoofing step has decided to perform transport level spoofing on the transport level connection, connection priority is set in accordance with the at least one field.

54. (New) A system comprising:

a maximum segment size setting unit that is configured to set TCP maximum segment size in accordance with an IP address.

55. (New) A method comprising:

setting TCP maximum segment size in accordance with an IP address.

56. (New) A system comprising:

a maximum segment size setting unit that is configured to set TCP maximum segment size in accordance with a TCP port number.

57. (New) A method comprising:

setting TCP maximum segment size in accordance with a TCP port number.